

Abstract of Disclosure

A portable mapping tool for use in a horizontal drilling system and associated methods use a boring tool configured for transmitting a locating signal. The mapping tool also includes at least one electromagnetic field detector which is configured for measuring the locating signal from a fixed position proximate to the surface of the ground in a drilling area. The mapping tool includes a housing and a transmitter arrangement supported by the housing for transmitting a setup locating signal for reception by the detector in the region for use in determining certain initial conditions at least prior to drilling. The associated methods include the step of configuring the mapping tool for transmitting a setup locating signal for reception by the detector in the region and using the received setup locating signal in determining certain initial conditions at least prior to drilling.